

Abstracts

Special 3D-TLM corner nodes for singular field regions

G. Tardioli, L. Cascio, M. Righi and W.J.R. Hoefer. "Special 3D-TLM corner nodes for singular field regions." 1997 MTT-S International Microwave Symposium Digest 1. (1997 Vol. I [MWSYM]): 317-320.

A novel procedure to incorporate the static field configuration at field singularities into a 3D-TLM mesh is proposed. The procedure is systematic and consists in a modification of the scattering algorithm of the corner node. The modified cell imposes the correct singular field in the vicinity of a conducting edge using the information of the surrounding field evolution. The results for canonical resonators are consistent with those obtained with standard TLM simulation with cell size five to six times smaller.

[Return to main document.](#)